In the Claims:

1. (Currently Amended) A method for diagnosing tumorigenicity in a human patient, comprising:

obtaining a biological sample containing cells from said patient;

detecting the protein encoded by SEQ ID NO. 16 ~~GP88~~ in said cells of said biological sample;

determining the number of ~~GP88 positive~~ cells containing said protein in said sample; and

determining the ratio of ~~GP88 positive~~ cells containing said protein to the total number of cells in said biological sample, wherein ~~said~~ a ratio greater than zero is indicative of tumorigenicity.

2. (Original) The method of claim 1, wherein said biological sample comprises a material selected from the group consisting of blood, serum, plasma, urine, nipple aspirate, cerebrospinal fluid, liver, kidney, breast, bone, brain, colon, lung, testes, or ovary.

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3. (Original) The method of claim 1, wherein said patient has been diagnosed with cancer.

4. (Original) The method of claim 3, wherein said cancer is selected from the group consisting of breast, ovarian, kidney, bone, pancreatic, testicular, liver, brain, colon, lung, and skin cancer.

5. (Currently Amended) The method of claim 1, wherein said protein ~~GP88~~ is detected by immunostaining with an anti-human GP88 antibody.

6. (Currently Amended) The method of claim 1, where said protein ~~GP88~~ is detected by diagnostic imaging with an anti-human GP88 antibody.

7. (Currently Amended) The method of claim 6 wherein said protein ~~GP88~~ is detected by magnetic resonance imaging.

8. (Currently Amended) The method of claim 6 wherein said protein ~~GP88~~ is detected by ultrasound.

9. (Currently Amended) The method of claim 6 wherein said protein ~~GP88~~ is detected by monoclonal antibody imaging.

10. (Original) The method of claim 6 wherein said anti-human GP88 antibody is radiolabelled.

11. (Original) The method of claim 5, wherein said antibody is labeled.

12. (Original) The method of claim 10, wherein said label is selected from the group consisting of biotin, enzymatic, radioisotopic, fluorescent, and chemical labels.

13. Claims 13-19 (Withdrawn).

20. (Currently Amended) The method of claim 1, wherein said number of ~~GP88 positive~~ cells is determined by microscopic examination.

21. (Original) The method of claim 1, wherein said number of ~~GP88 positive~~ cells is determined by a technique selected from group consisting of FACS analysis, luminex detection, antibody microarray, digital scanner, and cell sorter.

22. (Original) The method of claim 1 wherein said ratio is at least about 1%.

23. (Original) The method of claim 22 wherein said ratio is at least about 5%.

24. (Original) The method of claim 23 wherein said ratio is at least about 10%.

25. (Original) The method of claim 24 wherein said ratio is at least about 25%.

26. (Original) The method of claim 25 wherein said ratio is at least about 50%.

27. (Currently Amended) A method of determining whether a human patient is resistant to the antineoplastic effects of antiestrogen therapy, comprising:

obtaining a biological sample containing cells from said patient; ~~detecting GP88 in said biological sample;~~ and

~~determining~~ detecting the ~~amount~~ presence of the protein encoded by SEQ ID NO. 16 ~~GP88~~ in said sample wherein the ~~amount~~ presence of said protein ~~GP88~~ is indicative of resistance to the antineoplastic effects of antiestrogen therapy.

28. (Currently Amended) A method of determining whether a human patient is resistant to the antineoplastic effects of antiestrogen therapy, comprising:

obtaining a biological sample containing cells from said patient;

detecting the protein encoded by SEQ ID NO. 16 ~~GP88~~ in said cells of said biological sample;

determining the number of ~~GP88 positive~~ cells containing said protein in said sample; and

determining the ratio of ~~GP88 positive~~ cells containing said protein to the total number of cells in said biological sample wherein ~~said~~ a ratio greater than zero is indicative of resistance to the antineoplastic effects of antiestrogen therapy.

29. (Original) The method of claim 27, wherein said biological sample comprises a material selected from the group consisting of blood, serum, plasma, urine, nipple aspirate, cerebrospinal fluid, liver, kidney, breast, bone, testes, brain, colon, lung, or ovary.

30. (Original) The method of claim 27, wherein said patient has been diagnosed with cancer.

31. (Original) The method of claim 30, wherein said cancer is selected from the group consisting of breast, ovarian, kidney, bone, pancreatic, testicular, liver, brain, colon, lung, and skin cancer.

32. (Currently Amended) The method of claim 27, wherein said protein ~~GP88~~ is detected by immunostaining with an anti-human GP88 antibody.

33. (Currently Amended) The method of claim 32, where said protein ~~GP88~~ is detected by diagnostic imaging with an anti-human GP88 antibody.

34. (Currently Amended) The method of claim 33 wherein said protein ~~GP88~~ is detected by magnetic resonance imaging.

35. (Currently Amended) The method of claim 33 wherein said protein ~~GP88~~ is detected by ultrasound.

36. (Currently Amended) The method of claim 33 wherein said protein ~~GP88~~ is detected by monoclonal antibody imaging.

37. (Original) The method of claim 33 wherein said anti-human GP88 antibody is radio labeled.

38. (Original) The method of claim 32, wherein said antibody is labeled.

39. (Original) The method of claim 38, wherein said label is selected from the group consisting of biotin, enzymatic, radioisotopic, fluorescent, and chemical labels.

Claims 40-44 (Withdrawn).

45. (Currently Amended) The method of claim 27, wherein said number of ~~GP positive~~ cells is determined by a technique selected from group consisting of FACS analysis, luminex detection, antibody microarray, digital scanner, and cell sorter.

46. (Currently Amended) The method of claim ~~27~~ 28 wherein said ratio is at least about 10%.

47. (Original) The method of claim 46 wherein said patient is estrogen receptor positive.

48. (Original) The method of claim 46 wherein said ratio is at least about 25%.

49. (Original) The method of claim 48 wherein said patient estrogen receptor positive.

50. (Original) The method of claim 48 wherein said ratio is at least about 50%.

51. (Original) The method of claim 50 wherein said patient is estrogen receptor positive.

52. (Original) The method of claim 27 wherein said amount is at least about 10%.

53. (Original) The method of claim 52 wherein said patient is estrogen receptor positive.

54. (Original) The method of claim 53 wherein said amount is at least about 25%.

55. (Original) The method of claim 54 wherein said patient estrogen receptor positive.

56. (Original) The method of claim 55 wherein said amount is at least about 50%.

57. (Original) The method of claim 56 wherein said patient is estrogen receptor positive.

58. (Original) The method of claim 28 wherein said ratio is at least about 10%.

59. (Original) The method of claim 58 wherein said patient is estrogen receptor positive.

60. (Original) The method of claim 59 wherein said ratio is at least about 25%.

61. (Original) The method of claim 60 wherein said patient estrogen receptor positive.

62. (Original) The method of claim 61 wherein said ratio is at least about 50%.

63. (Original) The method of claim 62 wherein said patient is estrogen receptor positive.

64. (Currently Amended) A method for diagnosing tumorigenicity, comprising:

obtaining a breast tissue sample containing cells from a patient;

detecting the protein encoded by SEQ ID NO. 16 ~~GP88~~ in said cells of said breast tissue sample by immunostaining with anti-human GP88 antibody;

determining the number of ~~GP88-positive~~ cells containing said protein in said sample by microscopic examination; and

determining the ratio of ~~GP88-positive~~ cells containing said protein to the total number of cells in said breast tissue sample wherein a ratio of at least about 1% indicates tumorigenicity.

65. (Allowed) A method of determining whether an estrogen receptor positive patient is resistant to the antineoplastic effects of tamoxifen, comprising:

obtaining a breast tissue sample containing cells from said patient;

detecting GP88 in said cells of said breast tissue sample by immunohistochemical staining with anti-human GP88 antibody;

determining the number of GP88 positive cells in said sample by microscopic examination; and

determining the ratio of GP88 positive cells to the total number of cells in said biological sample wherein a ratio of at least about 10% indicates said patient is resistant to the antineoplastic effects of tamoxifen.

Claims 66-85 (Withdrawn)